

**ABSTRACT**

An electronic endoscope apparatus has a single coaxial cable which combines a power line and signal line installed between a scope and a processor unit. A waveform superimposing circuit of the scope superimposes a video signal on power transmitted through the coaxial cable and superimposes scope-side reference pulses on a blanking period of the first horizontal line signal in the first field of the video signal. On the other hand, the processor unit superimposes processor-side reference pulses on a blanking period of the first horizontal line in the second field of the video signal. Then, the scope and the processor unit perform video processing based on timing signals synchronized with the reference pulses. Alternatively, an electromagnetic coupler may be installed instead of the coaxial cable and the video signal and reference pulses may be superimposed on AC power supplied electromagnetically.